

AAFARS

Advanced Aviation Forward Area Refueling System



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The AAFARS is a lightweight, modular, air-emplaced refueling system for use when aircraft refueling sites are inaccessible by ground transport or urgency of the situation requires rapid emplacement and/or lateral movement of forward refueling sites. Provides filtered fuel at 55 gallons per minute (GPM) at four fueling points simultaneously or 90 GPM at one fueling point. This system can be set-up in 20 minutes by four soldiers in MOPP IV and cold weather clothing.

The AAFARS M100A1 shall differ from the previously fielded model M100 by including: fuel drums, drum repair kits, drum towing yoke, containment berms, fuel test kit, fuel spill kit, TRICON containers for shipment/storage, NATO adapters, NATO power cable, special tool kit and reusable component containers.

System Includes

- Pump, engine, accessory and filter separator modules
- Auxiliary pump assembly (for defueling)
- Four nozzle kits (containing D-1, CCR, and open port)
- Discharge hoses and fittings
- Suction hoses
- Drum fittings and adapter kits
- Grounding rods
- Fire extinguishers
- Component transport bags

*Additional Authorization List (AAL) item: Collapsible Fabric Drums



Operational Concept

Aviation Refueling System:

- Provide rapid refueling to combat aircraft on the battlefield
- Simultaneously refuel four-aircraft 100 feet apart at 55 GPM
- Modular configuration; 4-soldier lift and carry

Contact Information

PM PAWS

www.tacom.army.mil/dsa/pmtaws/pm_paws

COM: (586) 574-4200 DSN: 786-4200

FAX: (586) 574-3988

PAWS Help Line

pawshelp@tacom.army.mil

COM: (586) 574-4143 DSN: 786-4143

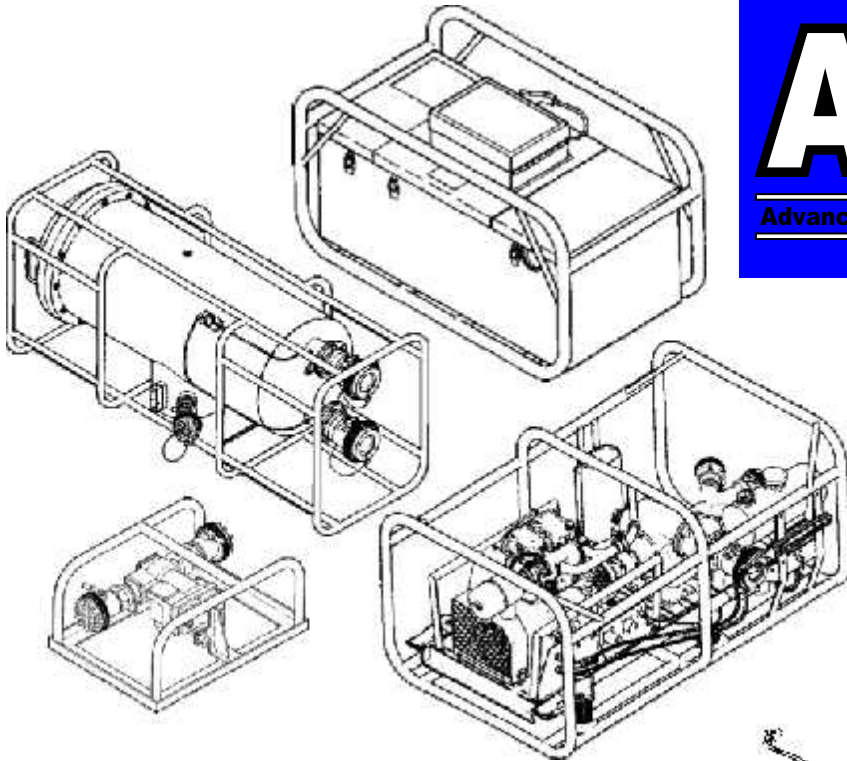
QUARTERMASTER

www.quartermaster.army.mil



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LIN	NSN	SSN	BOIP
F42611	4930-01-380-4856	R21800	Q036AA

*Readiness reportable IAWAR 700-138 (Action to re-designate as "Reportable - Yes" has been initiated.)

Transportability

Vehicle

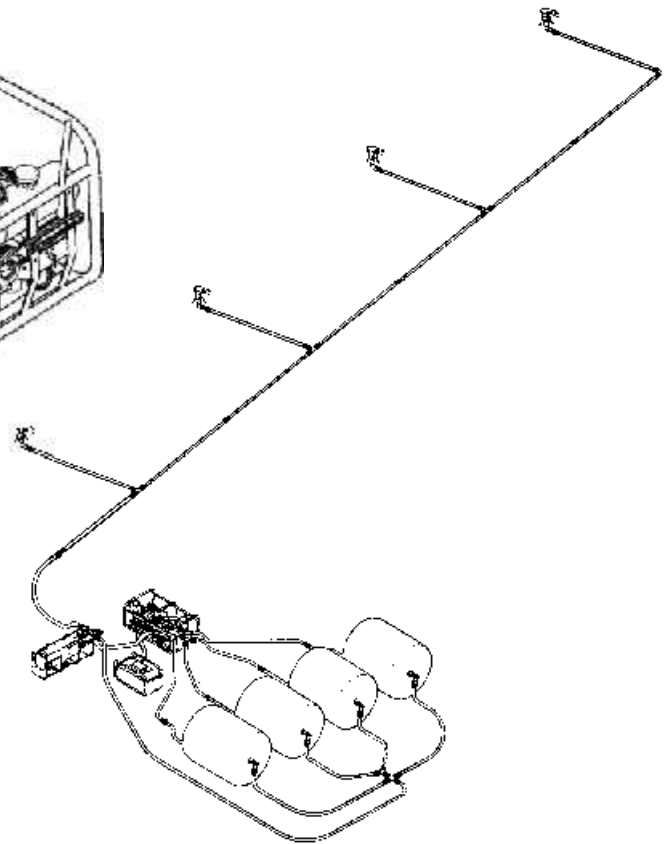
- HMMWV with trailer (cargo models only)
- 5-ton cargo, standard bed, w/o dropsides

Fixed wing

- C-5, C-17, C-130, and C-141 per MIL-HDBK-1791
- Low velocity air drop (LVAD) per MIL-STD-814

Rotary wing

- 2 each UH-1 (M100 only)
- UH-60 or CH-47 internal and external (sling or EAT)



Environmental Conditions

Storage -28°F to 160°F

Operation -25°F to 120°F

Performance

Refueling rate (simultaneous 4-point).....	Minimum 55 GPM
Refueling rate (single-point).....	Maximum 90 GPM
Set-up.....	Maximum 20 minutes
Reliability.....	195 hr MTBF, 43 hr MTBOMF
Maintainability (M100).....	Maintenance ratio of 0.11
Maintainability (M100A1).....	Maintenance ratio of 0.05

Dimensions

• Accessory module	40 L x 22 W x 22 H ft	156 lb
• Engine module	24 L x 22 W x 19 H ft	166 lb
• Filter separator	55 L x 20 W x 24 H ft	147 lb
• Pump module	56 L x 36 W x 28 H ft	170 lb